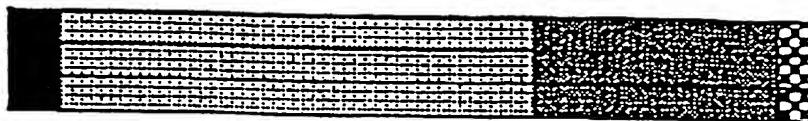
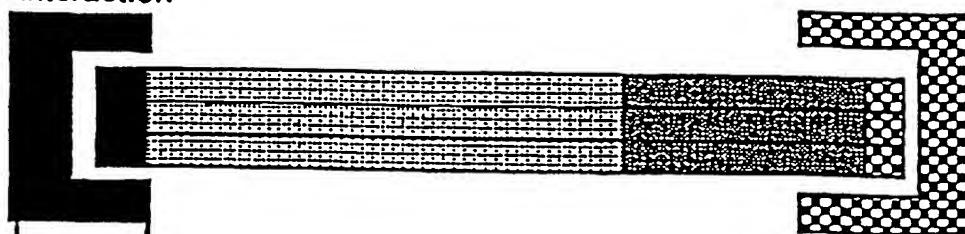


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A Wild type fiber trimer



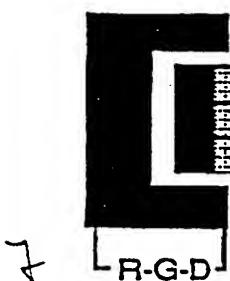
C Fiber-penton interaction



CAR Receptor-fiber interaction
mediates binding
to the cell surface

R-G-D
↓
Mediates
internalisation of
virus via Integrins
on the cell surface

5 Recombinant fiber



6
Cellular receptor
binding to new
ligand on
recombinant fibers

R-G-D

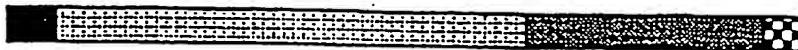
Code

- 8 Fiber tail
- 9 Fiber shaft
- 10 Fiber knob
- 11 New trimerisation motif

- 12 Linker motif
- 13 New cellbinding ligand
- 14 Native trimerisation motif
- 15 Nuclear localisation signal

Fig. 1

Wild type fiber.



Type A



Type A1. Shaft repeat 1.



Type A7. Shaft repeats 1-7



Type B



Type C



R1 R18-21

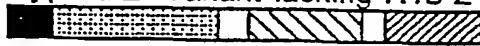
Type D



R 1-8

R18-21

Type DΔ. Variant lacking R18-21



Type E. Contains A, B and C sheets of knob.



Code

Fiber tail

Linker motifs

ASGGPE = Pseudo exo

Fiber shaft

ASEGNSD = TPA

Fiber knob

ASTPEPDP = Ab Hinge, mouse

New trimerisation motif

AKKLNDDAQAPKSD from SpA

Linker motif

TPLGDTTHTSG = Upper hinge from human IgG3

New cellbinding ligand

(GGGGS)₄

Native trimerisation motif

R = Shaft repeat

Fig. 2

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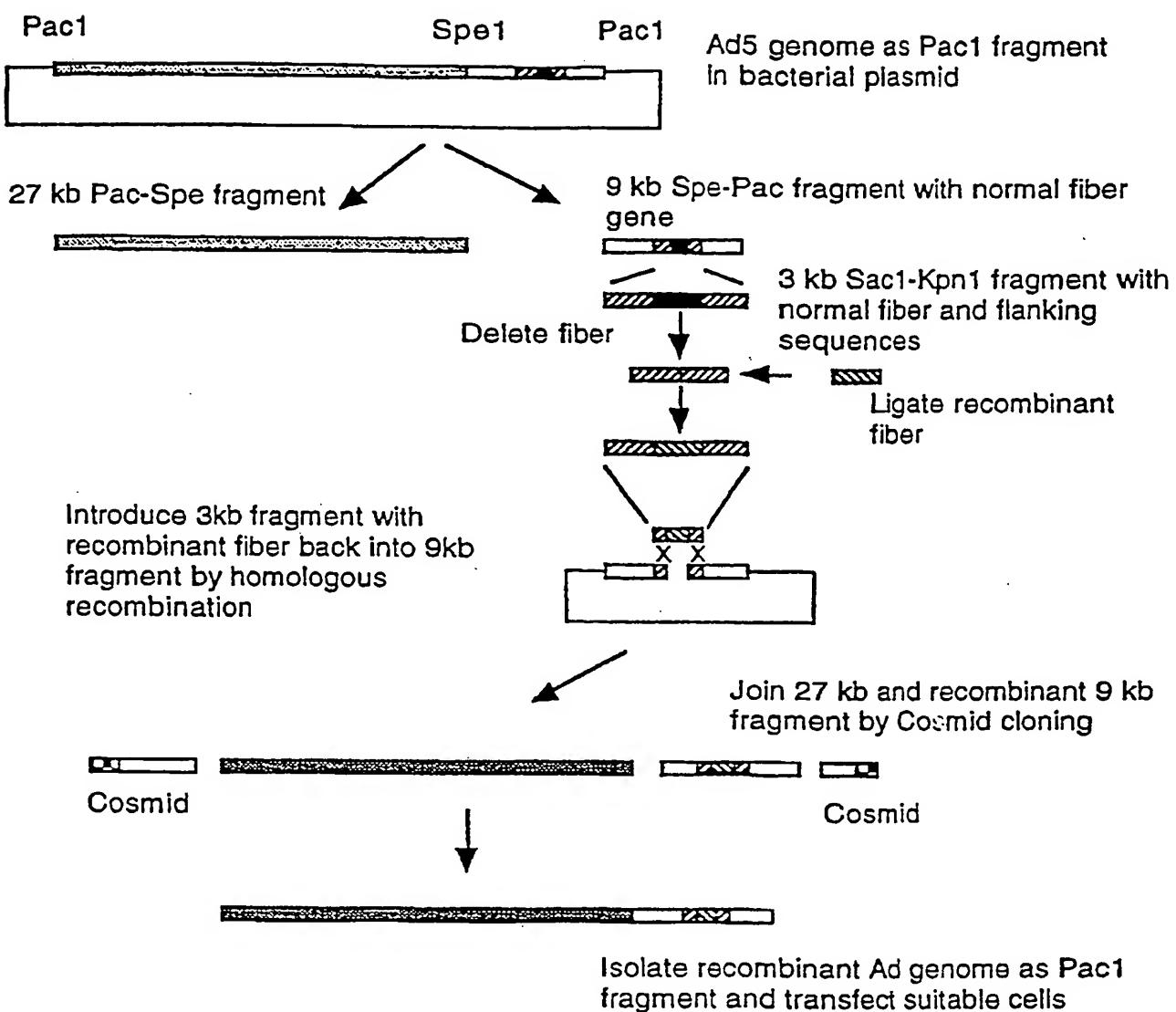
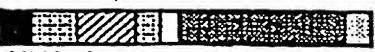
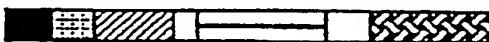
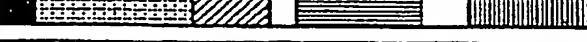


Fig. 3

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Type A

	<i>Time in days for development of plaques on primarily transfected cells</i>
A1 Knob	14
	
A7 Knob	11-14
	
A1 RGD	23
	
A7 RGD	16
	
A7 NLS RGD	Not known
	
A1 EGF	Uncertain
	
A1 scFv	Uncertain
	
A1 scTCR	Uncertain
	
A7 scTCR	Uncertain
	
	As WT
	As WT
	As WT

Color code

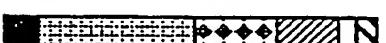
	Fiber tail		Single chain antibody
	Fiber shaft		V α
	Fiber knob		V β
	New trimerisation motif		C β
	Linker motif		C κ
	EGF		RGD
	Native trimerisation motif		Nuclear localization signal

Fig. 4a

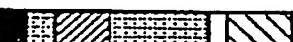
5/5

Time in days for development of plaques on primarily transfected cells

Type B

	21
	23
	No plaques
	12
	11
	No plaques

Type C

	Uncertain
---	-----------

Type D

	15
	Uncertain

Code

	Fiber tail		(Gly4Ser)4 linker
	Fiber shaft		Turn b from repeat 17 of Ad5 fiber shaft
	Fiber knob		Turn b from repeat 22 of Ad5 fiber shaft
	New trimerisation motif		
	Linker motif		
	EGF		
	Native trimerisation motif		

Fig. 4b